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(54) Title: METHOD AND APPARATUS FOR SETTING UP A COMMUNICATION WITH A TARGET BASE STATION IN A CELLULAR OR CORDLESS MOBILE TELECOMMUNICATIONS SYSTEM

## (57) Abstract

Methods, systems and network elements are described to improve the speed of handover in a mobile radio telecommunications system. In one embodiment a mobile terminal (114) transmits a list of addresses of network nodes (102, 103, 105, 122, 125) to a target base station (106) in preparation for setting up a new radio link to the target base station (106). The list of addresses can be used by the target base station (106) to select a node (122, 125) which is common to both the old and the new communication path and to address this node directly without requiring a cross-over switch network query. The new path (122, 110, 106) can then be set up quickly ready for the handover to target base station (106). In a further embodiment the network distributes pre-authenticated signatures for a mobile terminal (114) to the nodes (102, 103, 105, 122, 125) of the network currently supporting a communication. This allows local verification of a mobile terminal (114) when it attempts to set up a new radio link with a target base station (106). In yet a further embodiment the target base station (106) starts fast power control with the mobile terminal (114) before the new communications path (125, 110, 106) has been set up through the network.

